

WHAT IS CLAIMED IS:

1. A system for culturing a biological material on or beneath a chorioallantoic membrane (CAM), comprising:
 - a fertile egg including said CAM, configured *ex ovo*; and
 - a culture dish including said fertile egg,

wherein said CAM is oriented toward an air interface between said fertile egg in said culture dish and a local atmosphere, and is adapted to be a surface upon or beneath which said biological material is cultured.
2. The system of claim 1, wherein said fertile egg is an avian egg.
3. The system of claim 1, wherein said fertile egg is a Japanese quail egg.
4. The system of claim 1, wherein said biological material is selected from the group consisting of organs, fragments of organs, tissues, tissue sections, cell suspensions, physical three-dimensional matrices containing embedded live cells, and combinations thereof.
5. The system of claim 1, further including multiple fertile eggs, configured *ex ovo*, adapted to be a unitary surface upon or beneath which said biological material is cultured.
6. The system of claim 1, wherein said fertile egg is obtained from a transgenic animal, including in its cells an inducible transgene that causes apoptosis therein.
7. The system of claim 1, further including a scaffold support structure on the surface of said CAM to support the organization and/or anchoring of xenografts thereto.

8. The system of claim 7, wherein said scaffold support structure is selected from biological supports, non-biological supports and at least one piece of eggshell from said fertile egg.
9. A method for preparing a system to culture a biological material, comprising:
 - incubating a fertile egg *in ovo* for an initial period;
 - opening said fertile egg;
 - placing the contents of said fertile egg into a culture dish; and
 - culturing said fertile egg *ex ovo* for an additional period to provide time for a vascularized chorioallantoic membrane (CAM) to develop, said CAM becoming a suitable surface upon or beneath which to deposit and culture said biological material.
10. The method of claim 9, wherein said fertile egg is an avian egg.
11. The method of claim 9, wherein said fertile egg is a Japanese quail egg.
12. The method of claim 9, wherein said biological material is selected from the group consisting of organs, fragments of organs, tissues, tissue sections, cell suspensions, physical three-dimensional matrices containing embedded live cells, and combinations thereof.
13. The method of claim 9, further including incubating, opening, placing the contents of and culturing multiple fertile eggs *ex ovo* to create a unitary surface upon or beneath which said biological material is cultured.
14. The method of claim 9, wherein said fertile egg is obtained from a transgenic animal, including in its cells an inducible transgene that causes apoptosis therein.
15. The method of claim 9, further including providing a scaffold support structure on the surface of said CAM to support the organization and/or anchoring of xenografts thereto.

16. The method of claim 15, wherein said scaffold support structure is selected from biological supports, non-biological supports and at least one piece of eggshell from said fertile egg.
17. A method for eliminating cells from a xenograft transplant, comprising:
 - incubating a fertile egg *in ovo* for an initial period, said fertile egg being from a transgenic animal, including in its cells an inducible transgene that causes apoptosis therein;
 - opening said fertile egg;
 - placing the contents of said fertile egg into a culture dish;
 - culturing said fertile egg *ex ovo* for an additional period to provide time for a vascularized chorioallantoic membrane (CAM) to develop, said CAM becoming a suitable surface upon or beneath which to deposit and culture said biological material;
 - culturing said biological material upon or beneath said CAM to create a xenograft;
 - transplanting said xenograft to a transplant recipient; and
 - inducing said transgene to cause apoptosis in said cells of said transgenic animal.